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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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112	7590	01/24/2006	EXAMINER	
ARMSTRONG WORLD INDUSTRIES, INC.			SIMONE, CATHERINE A	
LEGAL DEPARTMENT			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/725,117	MAUK ET AL.	
	Examiner	Art Unit	
	Catherine Simone	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 09 November 2005.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,3-5,7-10,12-14,16,19,20,23,26 and 28-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,3-5,7-10,12-14,16,19,20,23,26 and 28-34 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Withdrawn Rejections

1. The 35 U.S.C. 102 rejection of claims 3, 4, 5, 14, 15 and 26-31 as anticipated by Kupits of record in the Office Action mailed 6/13/05, Pages 2-3, Paragraph #5 has been withdrawn due to the Applicant's amendment filed 11/9/05.
2. The 35 U.S.C. 103 rejection of claim 9 over Kupits in view of Heiges et al. of record in the Office Action mailed 6/13/05, Pages 5-6, Paragraph #8 has been withdrawn due to the Applicant's amendment filed 11/9/05.
3. The 35 U.S.C. 103 rejection of claims 13, 23 and 32-34 over Kupits in view of Hiragami et al. of record in the Office Action mailed 6/13/05, Pages 7-8, Paragraph #10 has been withdrawn due to the Applicant's amendment filed 11/9/05.

Repeated Rejections

4. The 35 U.S.C. 103 rejection of claims 1, 7, 8, 10 and 12 over Kupits in view of Eiden is repeated for the reasons previously set forth in the Office Action mailed 6/13/05, Pages 4-5, Paragraph #7.
5. The 35 U.S.C. 103 rejection of claims 16, 19 and 20 over Kupits in view of Eiden and in view of Hiragami et al. is repeated for the reasons previously set forth in the Office Action mailed 6/13/05, Pages 6-7, Paragraph #9.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 3, 4, 5, 13, 14, 23, 26 and 28-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The recitation "at room temperature" in claim 26 is deemed new matter. The specification, as originally filed, does not provide support for the invention as is now claimed.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 3, 4, 26 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Marchal (US 4,886,708).

Regarding claim 26, Marchal discloses a floor covering comprising a composition including a binder, a plasticizer and a substance capable of migration within the composition at room temperature (see col. 1, lines 58-66), the binder comprising polyvinyl chloride (PVC), the

plasticizer being in an amount of at least 12 wt% based on PVC (see col. 3, lines 20-25 and 65-68), and the amount of the substance capable of migration being in excess of its compatibility in the composition (see col. 1, lines 20-28 and col. 2, lines 20-21). Regarding claim 3, the floor covering is homogenous (see col. 1, lines 8-12). Regarding claim 4, the floor covering is multilayered (see col. 1, lines 62-64). Regarding claim 31, note the floor covering further comprises a substrate and a coating, the coating comprising the binder, plasticizer and substance of migration (see col. 1, lines 33-44).

10. Claims 3, 4, 13, 14, 23, 26 and 31-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiragami et al. (US 4,501,783).

Regarding claim 26, Hiragami et al. discloses a floor covering comprising a composition including a binder, a plasticizer and a substance capable of migration within the composition at room temperature (see examples 1-5), the binder comprising polyvinyl chloride (PVC), the plasticizer being in an amount of at least 12 wt% based on PVC (see col. 2, lines 1-10 and examples 1-5), and the amount of the substance capable of migration being in excess of its compatibility in the composition (see col. 3, lines 19-22 and 32-45). Regarding claim 3, the floor covering is homogenous (see col. 1, lines 57-68). Regarding claim 4, the floor covering is multilayered (see col. 3, lines 6-9). Regarding claim 13, the coating has a thickness of about 10 μm to about 100 μm (see col. 2, line 9). Regarding claim 14, the substrate comprises the same PVC as the PVC of the coating (see col. 3, line 66). Regarding claim 31, note the floor covering further comprises a substrate and a coating, the coating comprising the binder, plasticizer and substance of migration (see col. 3, lines 6-9). Regarding claims 32 and 33, the coating comprises a particulate material having a hardness greater than the hardness of the PVC of the coating (see

col. 2, lines 15-33). Regarding claim 34, the particulate material comprises a polymer (see col. 2, lines 22-27). Regarding claim 23, a plurality of the particles of the particulate material protrude above the surface of the PVC (Fig. 1, element 2').

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Marchal (US 4,886,708) or Hiragami et al. (US 4,501,783) in view of Berenger (US 6,013,329).

Marchal and Hiragami et al. each teach the floor covering as detailed above. However, each fails to disclose the PVC of the composition having a K-value from about 40 to 80. Berenger teaches that it is old and well-known in the art to have a PVC coating wherein the PVC has a K-value between 55 and 85 (see col. 3, lines 27-29) for the purpose of manufacturing a floor covering with a plastic surface finish which is much glossier, thereby in particular dispensing with any application of one or more surface varnishes.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the PVC of the PVC coating in either Marchal or Hiragami et al. to have a K-value from about 40 to about 80 as suggested by Berenger in order to form a floor covering with a plastic surface finish which is much glossier, thereby in particular dispensing with any application of one or more surface varnishes.

13. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marchal (US 4,886,708) in view of Kondo et al. (EP 0 742 098 A1).

Marchal discloses a floor covering comprising a composition including a binder, a plasticizer and a substance capable of migration within the composition at room temperature (see col. 1, lines 58-66), the binder comprising polyvinyl chloride (PVC), the plasticizer being in an amount of at least 12 wt% based on PVC (see col. 3, lines 20-25 and 65-68), and the amount of the substance capable of migration being in excess of its compatibility in the composition (see col. 1, lines 20-28 and col. 2, lines 20-21). However, Marchal fails to disclose the substance capable of migration being a wax-like substance selected from the group consisting of a partially synthetic wax, a fully synthetic wax, a natural wax, a modified natural wax and mixtures thereof.

Kondo et al. teaches that it is old and well-known in the art to have a wax-like substance selected from the group consisting of a partially synthetic wax, a fully synthetic wax, a natural wax, a modified natural wax and mixtures thereof as the substance capable of migration (see page 4, lines 7-23) in a surface layer of a floor covering for the purpose of improving lubricity as well as flaw resistance, stain resistance and abrasion resistance.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the substance capable of migration in the wear layer of the floor covering in Marchal to be a wax-like substance selected from the group consisting of a partially synthetic wax, a fully synthetic wax, a natural wax, a modified natural wax and mixtures thereof as suggested by Kondo et al. in order to improve lubricity as well as flaw resistance, stain resistance and abrasion resistance.

14. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiragami et al. (US 4,501,783) in view of Kondo et al. (EP 0 742 098 A1).

Hiragami et al. discloses a floor covering comprising a composition including a binder, a plasticizer and a substance capable of migration within the composition at room temperature (see examples 1-5), the binder comprising polyvinyl chloride (PVC), the plasticizer being in an amount of at least 12 wt% based on PVC (see col. 2, lines 1-10 and examples 1-5), and the amount of the substance capable of migration being in excess of its compatibility in the composition (see col. 3, lines 19-22 and 32-45). However, Hiragami et al. fails to disclose the substance capable of migration being a wax-like substance selected from the group consisting of a partially synthetic wax, a fully synthetic wax, a natural wax, a modified natural wax and mixtures thereof.

Kondo et al. teaches that it is old and well-known in the art to have a wax-like substance selected from the group consisting of a partially synthetic wax, a fully synthetic wax, a natural wax, a modified natural wax and mixtures thereof as the substance capable of migration (see page 4, lines 7-23) in a surface layer of a floor covering for the purpose of improving lubricity as well as flaw resistance, stain resistance and abrasion resistance.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the substance capable of migration in the surface layer of the floor covering in Hiragami et al. to be a wax-like substance selected from the group consisting of a partially synthetic wax, a fully synthetic wax, a natural wax, a modified natural wax and mixtures thereof as suggested by Kondo et al. in order to improve lubricity as well as flaw resistance, stain resistance and abrasion resistance.

15. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Marchal (US 4,886,708) or Hiragami et al. (US 4,501,783) in view of Kondo et al. (EP 0 742 098 A1) and further in view of Apikos (US 3,518,215).

Marchal and Hiragami et al. each teach the floor covering as detailed above. However, Marchal and Hiragami et al. each fails to disclose the substance capable of migration being a wax-like substance comprising an amide wax.

Kondo et al. teaches that it is old and well-known in the art to have a wax-like substance as the substance capable of migration (see page 4, lines 7-23) in a surface layer of a floor covering for the purpose of improving lubricity as well as flaw resistance, stain resistance and abrasion resistance. Apikos teaches that it is old and well-known in the art to have an amide wax as the substance capable of migration (see col. 2, lines 49-55) in a surface layer for the purpose of providing temporary surface protection against abrasion, dirt and other damage occurring in storage and handling.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the substance capable of migration in the surface layer of the floor covering in either Hiragami et al. or Marchal to be a wax-like substance as suggested by Kondo et al. in order to improve lubricity as well as flaw resistance, stain resistance and abrasion resistance. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the substance capable of migration in the surface layer of the floor covering in either Marchal or Hiragami et al. to be an amide wax as suggested by Apikos in order to provide temporary surface protection against abrasion, dirt and other damage occurring in storage and handling.

16. Claims 13, 14, 23 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marchal (US 4,886,708) in view of Hiragami et al. (US 4,501,783).

Marchal discloses a floor covering comprising a composition including a binder, a plasticizer and a substance capable of migration within the composition at room temperature (see col. 1, lines 58-66), the binder comprising polyvinyl chloride (PVC), the plasticizer being in an amount of at least 12 wt% based on PVC (see col. 3, lines 20-25 and 65-68), and the amount of the substance capable of migration being in excess of its compatibility in the composition (see col. 1, lines 20-28 and col. 2, lines 20-21). However, Marchal fails to disclose the coating having a thickness of about 10 μm to about 100 μm , and the substrate comprising the same PVC as the PVC of the coating, and further the coating comprising a polymeric particulate material having a hardness greater than the hardness of the PVC and a plurality of particles of the particulate material protruding above the surface of the PVC.

Hiragami et al. teaches that it is old and well-known in the art to have a PVC composition coating including a polymeric particulate material (see col. 3, lines 6-9) having a hardness greater than the hardness of the PVC and a plurality of the particles of the particulate material protrude above the surface of the PVC (Fig. 1, #2'; also see col. 3, lines 6-9) for the purpose of producing a resilient PVC floor covering with improved wear and abrasion resistance and non-slip properties. Hiragami et al. also teaches that it is old and well-known in the art to have the PVC coating have a thickness of about 10 μm to about 100 μm (see col. 2, line 9) for the purpose of forming a surface layer for a floor covering. Hiragami et al. further teaches that it is old and well-known in the art to have a substrate comprising the same PVC as the PVC of the coating

(see col. 3, line 66) for the purpose of laminating the PVC surface layer thereto to form a floor covering.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the PVC composition of the wear layer in Marchal to include a polymeric particulate material having a hardness greater than the hardness of the PVC wherein a plurality of the particles of the particulate material protrude above the surface of the PVC wear layer as suggested by Hiragami et al. in order to produce a floor covering with higher wear and abrasion resistance and non-slip properties. Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the PVC coating in Marchal to have a thickness of about 10 μm to about 100 μm as suggested by Hiragami et al. in order to form a surface layer for a floor covering. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the substrate in Marchal to comprise the same PVC as the PVC of the coating as suggested by Hiragami et al. in order to laminate the PVC wear layer thereto to form a floor covering.

17. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marchal (US 4,886,708) in view of Kondo et al. (EP 0 742 098 A1).

Marchal discloses a floor covering comprising a layer having an exposed major surface, the layer comprising a composition including a binder, a plasticizer and a substance capable of migration within the composition (see col. 1, lines 36-42), wherein the binder comprises polyvinyl chloride (PVC), wherein the plasticizer is in an amount of at least about 12 wt% based on PVC (see col. 3, lines 20-25 and 65-68), and wherein the amount of the substance capable of

migration is in excess of its compatibility in the composition, whereby the substance capable of migration migrates to the exposed major surface (see col. 1, lines 20-25 and col. 2, lines 20-21). However, Marchal fails to disclose the substance capable of migration being a wax-like substance comprising a plurality of wax-like substances wherein the wax-like substances have different melting points.

Kondo et al. teaches that it is old and well-known in the art to have a plurality of wax-like substances with different melting points as the substance capable of migration (see page 4, lines 8-10) in a surface layer of a floor covering for the purpose of improving lubricity as well as flaw resistance, stain resistance and abrasion resistance.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the substance capable of migration in the wear layer of the floor covering in Marchal to be a wax-like substance comprising a plurality of wax-like substances having different melting points as suggested by Kondo et al. in order to improve lubricity as well as flaw resistance, stain resistance and abrasion resistance.

18. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiragami et al. (US 4,501,783) in view of Kondo et al. (EP 0 742 098 A1).

Hiragami et al. discloses a floor covering comprising a layer having an exposed major surface, the layer comprising a composition including a binder, a plasticizer and a substance capable of migration within the composition (see examples 1-5 and col. 1, lines 57-68), wherein the binder comprises polyvinyl chloride (PVC), wherein the plasticizer is in an amount of at least about 12 wt% based on PVC (see examples 1-5 and col. 2, lines 1-8), and wherein the amount of the substance capable of migration is in excess of its compatibility in the composition, whereby

the substance capable of migration migrates to the exposed major surface (see col. 3, lines 19-22 and 32-45). However, Hiragami et al. fails to disclose the substance capable of migration being a wax-like substance comprising a plurality of wax-like substances wherein the wax-like substances have different melting points.

Kondo et al. teaches that it is old and well-known in the art to have a plurality of wax-like substances with different melting points as the substance capable of migration (see page 4, lines 8-10) in a surface layer of a floor covering for the purpose of improving lubricity as well as flaw resistance, stain resistance and abrasion resistance.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the substance capable of migration in the surface layer of the floor covering in Hiragami et al. to be a wax-like substance comprising a plurality of wax-like substances having different melting points as suggested by Kondo et al. in order to improve lubricity as well as flaw resistance, stain resistance and abrasion resistance.

Response to Arguments

19. Applicant's arguments filed 11/9/05 have been fully considered but they are not persuasive.

Regarding claims 1, 7, 8, 10 and 12, Applicant argues "Since the purpose of forming the elevations and recesses in Eiden (permitting drainage of liquids from the upper surface of the floor covering) is different than the purpose of the presently claimed elevations and recesses (to improve soiling behavior in combination with the substance capable of migration), optimizing the elevations and recesses of Eiden to improve drainage would not necessarily yield the

presently claimed ranges of spacing and height. In fact, since the preferred elevations and recesses of Eiden have a difference in thickness between the raised and depressed portion of at least 1 mm and the preferred wave frequency of the sine wave of 25 mm from peak center in adjacent waves fall outside the ranges of present claim 1, optimizing the embossing of the Eiden floor covering to maximize drainage of liquids from the upper surface of the floor covering would fall outside the claimed ranges”.

Examiner agrees that the elevations and recesses are formed in the floor covering of Eiden to permit drainage of liquids from the upper surface of the floor covering. However, it is to be pointed out that the elevations and recesses formed in the floor covering of Eiden are formed to also improve the soiling behavior. In column 2, lines 10-13, Eiden discloses that the floor coverings should be used on floors “in food service and industrial areas where the presence of grease, oil, water and the like may create a slippery hazardous floor surface”. Therefore, the liquids being drained by the presence of elevations and recesses in the floor covering are *dirty* liquids such as grease, oil, water and the like. As a result, the surface of the floor covering will be removed of these dirty liquids and the soiling behavior will be improved. Thus, the elevations and recesses formed in the floor covering of Eiden improve the soiling behavior as well as permit drainage of liquids from the upper surface.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the floor covering in Kupits with elevations and recesses as suggested by Eiden in order to permit drainage of liquids from the upper surface of the floor covering and provide improved soiling behavior.

Although Eiden teaches ranges for the height and spacing of the elevations and recesses of the floor covering (see col. 4, lines 51-55 and 60-62), Eiden fails to teach the presently claimed ranges for the height and spacing of the elevations and recesses. However, the optimum ranges for the spacing and the height of the elevations and recesses would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify the ranges of the height and spacing of the elevations and recesses taught in Eiden to where the average spacing between profile peaks in the centerline is more than about 200 μm and less than about 1000 μm , and the difference in height between the elevations and the recesses is from about 20 μm to about 200 μm , since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP 2144.05 (II)*. One skilled in the art would clearly have been able to provide the floor covering in Kupits with elevations and recesses as taught by Eiden wherein the average spacing between profile peaks in the centerline is more than about 200 μm and less than about 1000 μm , and the difference in height between the elevations and the recesses is from about 20 μm to about 200 μm in order to provide improved soiling behavior, if so desired. Thus, the claims fail to patentably define over the prior art as applied above.

Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CAS
Catherine A. Simone
Examiner
Art Unit 1772
January 18, 2006

HP
HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

1/20/06